Incidental Catch of Seabirds in Longline Fisheries: Guidelines for Colonial Waterbird Conservation Practicioners (Guide for Colonial Waterbird Conservation Practitioners)

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Summary

Seabirds are being taken incidentally in various commercial longline fisheries in the world, and concerns are arising about the impacts of that incidental take. The incidental catch of seabirds may also have an adverse impact on fishing productivity and profitability. Governments, nongovernmental organizations, and commercial fishery associations are petitioning for regulatory measures to reduce the mortality of seabirds in longline fisheries in which seabirds are incidentally taken.

The development of a National Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries (NPOA-S) in the United States has emphasized that unique characteristics of all the Exclusive Economic Zone (EEZ, 3-200 miles) longline fisheries exist, and that the solution to seabird incidental catch issues will likely require a multi-faceted approach requiring different fishing techniques, the use of mitigating equipment, and education within the affected fisheries. Therefore, the NPOA-S does not prescribe specific mitigation measures for each longline fishery, nor does it attempt any intra- or interregional prioritizing. Rather, the NPOA-S provides a framework of actions that the National Marine Fisheries Service (NMFS), and the Fishery Management Councils as appropriate, should undertake with each longline fishery within its area of authority. By working cooperatively, fishermen, managers, scientists, and the public may use this national framework to achieve a balanced solution to the seabird incidental catch problem, promoting continuing sustainability of our national marine resources.

Discussion of the Issue

Longlines catch surface-feeding seabirds that consume vertebrate and invertebrate prey which resemble bait. During setting of the line seabirds are hooked as they attempt to capture the bait. Birds that habitually scavenge floating material from the sea surface are also susceptible to being hooked on longlines (Brothers 1991, Alexander *et al.* 1997, Brothers, Cooper *et al.* 1999). Recent studies have implicated longline fishing in population declines of some albatross species (Weimerskirch and Jouventin 1987, Croxall and Prince 1990, Croxall et al 1990, Murray et al. 1993). Longline fishing is considered the most recent and potentially most serious global threat faced by albatrosses and other procellariiform taxa (Brothers *et al.* 1999a). Except for the endangered short-tailed albatross, the U.S. Fish and Wildlife Service (USFWS) has not analyzed the potential impacts of the seabird incidental catch in U.S. longline fisheries on other seabird species populations.

Longline fisheries in which seabird incidental catch occurs are: tuna, broadbill (swordfish) and billfish in the South Pacific; toothfish in the Southern Ocean, and halibut, black cod, tuna, billfish, Pacific cod, Greenland halibut, cod, haddock, tusk and ling in the Northern Oceans (Pacific and Atlantic). The species of seabirds most frequently taken are albatrosses and petrels in the South Pacific and South Atlantic fisheries, Northern fulmar in the North Atlantic and fulmars, gulls and albatrosses in the North Pacific fisheries.

Concerns about the world incidental catch of seabirds led to the development of the *International Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries* (IPOA-S), a voluntary plan endorsed by the Food and Agriculture Organization of the United Nations Committee on Fisheries in

February 1999. The IPOA-S applies to States in whose waters longline fishing is being conducted by their own or foreign vessels, and to States that conduct longline fishing on the high seas and in the EEZs of other States, and calls on all States to implement the IPOA-S through the development of individual National Plans of Action.

Although the National Marine Fisheries Service (NMFS) is responsible for fishery actions that may impact seabird species, the USFWS has expertise and legal responsibility for seabird management. Given each agency=s responsibilities, the United States= NPOA-S has been developed collaboratively by NMFS and USFWS. The resulting NPOA-S is a collaborative effort that has increased communication between seabird specialists within both USFWS and NMFS. Maintaining this level of cooperation is a high priority for both agencies.

Approaches Taken and Recommended

The draft NPOA-S contains the following themes:

- 1) Action Items: NMFS, with the assistance of the Regional Fishery Management Councils (Councils), the NMFS Regional Science Centers and FWS, as appropriate, should conduct the following activities:
 - a) Detailed assessments of its longline fisheries for seabird incidental catch within two years of the adoption of the NPOA-S;
 - b) If a problem exists within a longline fishery, measures to reduce this seabird incidental catch should be implemented within two years. These measures should include data collection, prescription of mitigation measures, research and development of mitigation measures and methods, and outreach, education, and training about seabird incidental catch; and
 - c) Annual reports should be submitted to NMFS and USFWS national headquarters, on the status of seabird mortality for each longline fishery, including mitigation and research efforts and assessment information as available.
- <u>2) Interagency Cooperation</u>: The continuation, wherever possible, of the ongoing cooperative efforts between NMFS and FWS on seabird incidental catch issues and research.
- 3) International Cooperation: The United States= commitment, through the Department of State, NMFS and USFWS, to advocate the development of National Plans of Action within relevant international for a.

The development of the NPOA-S has emphasized that unique characteristics of all the EEZ longline fisheries exist, and that the solution to seabird bycatch issues will likely require a multi-faceted approach requiring different fishing techniques, the use of mitigating equipment, and education within the affected fisheries. Therefore, the NPOA-S does not prescribe specific mitigation measures for each longline fishery, nor does it attempt any intra- or inter-regional prioritizing. Rather, this NPOA-S provides a framework of actions that NMFS, and the Councils as appropriate, should undertake with each longline fishery within its area of authority. By working cooperatively, fishermen, managers, scientists, and the public may use this national framework to achieve a balanced solution to the seabird bycatch problem, promoting continuing sustainability of our national marine resources.

Attached reports contain the NPOA text as well as regional program descriptions for Alaska and Hawaii that include seabird avoidance regulations, seabird data collection components of observer programs, and outreach and education efforts.

Important Books, Chapters, and Web Sites

Alexander, K., Robertson, G., and Gales, R. AThe incidental mortality of albatrosses in longline fisheries. @ A report on the Workshop from the First International Conference on the Biology and Conservation of Albatrosses, Hobart, Australia.

Brothers, N., Cooper, J., and Lokkeborg, S. (1999). AThe Incidental Catch of Seabirds by Longline Fisheries: Worldwide Review and Technical Guidelines for Mitigation. @ FAO Fisheries Circular, 937, Food and Agriculture Organization of the United Nations, Rome. p. 100.

NMFS Alaska Regional Office Homepage. Protected Resources Division, Program to Reduce Seabird Bycatch in Alaska=s Longline Fisheries. http://www.fakr.noaa.gov/protectedresources/seabirds.html

Robertson, G. and Gales, R. 1999. (Eds). *Albatross Biology and Conservation* Surrey Beatty & Sons, Chipping Norton, Australia.

References Cited in Text

Brothers, N. (1991). AAlbatross mortality and associated bait loss in the Japanese longline fishery in the Southern Ocean. @ Ocean. Biol. Conserv., 55, pp. 255-268.

Brothers, N., Gales, R., and Reid, T. (1999a). AThe influence of environmental variables and mitigation measures on seabird catch rates in the Japanese tuna longline fishery within the Australian Fishing Zone, 1991-1995. @ *Biological Journal of the Linnean Society*, 88, pp. 85-101.

Croxall, J.P. and Prince, P.A. 1990. Recoveries of wandering albatrosses *Diomedea exulans* ringed at South Georgia 1958-1986. Ringing and Migration 11:43-51.

Croxall, J.P., Rothery P, Pickering S.P.C., and Prince, P.A. 1990. Reproductive performance, recruitment and survival of wandering albatrosses *Diomedea exulans* at Bird Island, South Georgia. J. Anim. Ecol. 59:775-796.

Murray, T.E., Bartle, J.A., Kalish, S.R., and Taylor, P.R. 1993. Incidental capture of seabirds by Japanese southern bluefin tuna longline vessels in New Zealand waters, 1988-1992. Bird Conservation International 3:181-210.

Weimerskirch, H. and Jouventin, P. 1987. Population dynamics of the wandering albatross, *Diomedea exulans*, of the Crozet Islands: causes and consequences of the population decline. Oikos 49:315-322.

Appendix A: National Plan of Action for the Reduction of Incidental Catch of Seabirds in Longline Fisheries

TO BE REPLACED BY FINAL PLAN

[Federal Register: September 9, 1999 (Volume 64, Number 174)]

[Notices]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration [I.D. 082799B]

National Plan of Action for the Reduction of Incidental Catch of Seabirds in Longline Fisheries

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Public notice.

SUMMARY: The United States, through a collaborative effort of NMFS and the U.S. Fish & Wildlife Service (FWS), is developing a National Plan of Action (NPOA) pursuant to the endorsement of the International Plan of Action (IPOA) for the Reduction of Incidental Catch of Seabirds in Longline Fisheries by the United Nations Food and Agriculture Organization (UN FAO) Committee on Fisheries (COFI) Ministerial Meeting in March 1999. Noting the increased numbers of incidental seabird catch in longline fisheries, this IPOA calls on COFI member states to voluntarily develop national plans on reducing this incidental seabird catch. The United States has committed itself to developing this national plan, and reporting on its implementation to COFI, no later than 2001. This notice provides a time frame for the completion of this project and an outline of the contents of this NPOA. The public is invited to provide written comments and suggestions for items to be incorporated or addressed within the NPOA.

DATES: Comments will be accepted on the Seabird NPOA from September 9, 1999 until September 30, 1999.

ADDRESSES: Written comments should be sent to David Kerstetter, NOAA-Fisheries/SF, 1315 East-West Highway, Silver Spring, MD 20910.

24 October 2000

FOR FURTHER INFORMATION CONTACT: David Kerstetter, 301-713-2337, ext. 107, or FAX 301-713-2313.

SUPPLEMENTARY INFORMATION: The ``International Plan of Action (IPOA) for Reducing Incidental Catch of Seabirds in Longline Fisheries" was endorsed in principle at the 23rd FAO COFI session in February 1999 and approved at the Fisheries Ministerial in March 1999. As with the two other IPOAs on sharks and capacity reduction, the Seabird IPOA calls on members to voluntarily develop an NPOA on this issue.

The FAO Fisheries Department has a draft budget for the 1999-2001 biennium of US\$ 304,000 to assist with implementation of the seabird Plan by its Members. These funds have been allocated primarily to staff time, consultants, and publication costs. FAO anticipates the following three major actions from this budget toward its members: (1) Providing technical assistance while preparing NPOAs, (2) providing assistance in coordinating research and training, and (3) assisting in the reporting process to COFI.

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The U.S. Government agencies did not wait for the passage of the IPOA to begin the work of seabird protection and management. Many measures have already been taken to reduce the incidental catch of these seabird species under such statutes as the Magnuson-Stevens Fishery Conservation and Management Act, the Endangered Species Act (ESA), and the Migratory Bird Treaty Act (MBTA). The U.S. NPOA is currently under development as a collaborative effort between NMFS and the Fish and Wildlife Service (FWS), with a draft Seabirds NPOA tentatively due for Federal Register notice in November 1999 and full completion of the Plan by January 2000.

Written comments on the Seabirds NPOA are encouraged (See ADDRESSES).

Proposed Schedule

Date	Item
September 1999	Release approved schedule and outline to public via a
	Federal Register notice.
October 1999	Collect and incorporate
	review comments.
November 1999	Release Draft NPOA for
	public comment.
January 2000	Respond to public comments
	and release final version
	of Seabirds NPOA.

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- b. Role of NMFS Headquarters and Regional Management Councils
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- a. International: Role of Member Countries
- b. International: Roles of Regional Fisheries Organizations
- c. Domestic: Regional Fishery Management Councils, Fishery

Management Plans, and Other Regulatory Documents

Longline Fisheries of the United States: Descriptions, Regulations, and Current Mitigation Efforts, by Fishery Management Councils and/or International Agreements

- a. Domestic Fisheries by Fishery Management Council:
- 1. New England FMC: NE Multispecies (FMP); Atlantic Halibut (non-FMP); Monkfish (non-FMP),
- 2. Mid-Atlantic FMC: Summer Flounder, Scup, Black Sea Bass (FMP); Atlantic Bluefish (FMP); Atlantic Mackerel, Squid and Butterfish (FMP); Monkfish (non-FMP); Tilefish (non-FMP),
- 3. South Atlantic (SA) FMC: SA Snapper-Grouper (FMP); SA Coastal Migratory Pelagics (CMP) (FMP),
- 4. Caribbean FMC: Caribbean Shallow Water Reef Fish (FMP); Caribbean Pelagics (non-FMP),
- 5. Gulf of Mexico (GOM) FMC: GOM Reef Fish (FMP); GOM Snapper/Grouper (FMP); GOM CMP (FMP),
- 6. Pacific FMC: West Coast Groundfish (FMP); Pacific Halibut (non-FMP); Shark/Bonito Longline/Setline (non-FMP),
- 7. North Pacific FMC: Bering Sea and Aleutian Islands (BS-AI) Groundfish (FMP); Gulf of Alaska (GOA) Groundfish (FMP); Octopus/Squid Longline (non-FMP),
- 8. Western Pacific (WP) FMC: WP Bottomfish/Seamount Groundfish (FMP and non-FMP); WP Pelagics (non-FMP), and
- 9. Secretary of Commerce Control: Atlantic Swordfish (FMP); Atlantic Sharks (FMP); Atlantic Tunas (non-FMP).
- b. U.S. State and State Cooperative Fisheries Management Agreements.
- c. International Fisheries Agreements:
- 1. International Convention for the Conservation of Atlantic Tunas (ICCAT),
- 2. Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR), and
- 3. International Pacific Halibut Commission (IPHC).
- d. U.S. Flagged Vessels.

References

Appendices

- I. International Plan of Action for the Reduction of Incidental Catch of Seabirds in Longline Fisheries
- II. Seabird Interaction Minimization Methods for Longline Fisheries
- III. NMFS National Bycatch Plan, Executive Summary
- IV. Summaries of Relevant Statutes: Magnuson-Stevens Fishery

Conservation and Management Act (FCMA), Migratory Bird Treaty Act, Endangered Species Act

V. Future Conferences and Events Related to Seabird-Fishery Interactions

VI. NMFS Regional Science Center and Management Council Contact Information

24 October 2000

Dated: September 1, 1999.

Bruce C. Morehead,

Acting Director, Office of Sustainable Fisheries, National Marine

Fisheries Service.

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